

REMARKS

This amendment, After Final is submitted in response to the Final Official Action, dated February 11, 2003. Claims 1-14 are pending in the application. Claims 1-14 are rejected.

Applicant traverses those rejections with which he has not complied, and based on the claim amendments presented above, and the arguments presented below, respectfully requests reconsideration and reexamination of the application, and withdrawal of the rejections.

The Specification

The specification has been amended to provide additional detail as to the structure and function of ramlocks, grommets, and ramlock tubes, for additional support, in addition to the original drawings and the specification, of claims 9-14.

The Claims

35 USC § 1112, 2<sup>nd</sup> Paragraph

Claims 9-14 stand rejected under 35 USC § 1112, 2<sup>nd</sup> Paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner states that the claims do not describe the process of joining ramlocks or grommets together in order to join two prefabricated panels together.

The specification has been amended to define the structure and use of ramlocks, grommets and ramlock tubes in more detail. In addition, claims 9-14 have been amended to include some structural detail with respect to ramlocks, grommets and ramlock tubes. Because the specification and claims clearly define the structure and use of ramlocks, grommets and ramlock tubes, the rejections are overcome. Therefore, Applicant respectfully requests withdrawal of the rejections.

No new matter has been added. The ramlocks, grommets, and ramlock tubes, including their shape, structure and manner of use in connecting component panels of

Applicant's invention are, and always have been, clearly shown in the drawings. The additional text merely provides more detailed explanation but does not add any new matter that was not previously disclosed.

35 USC § 102(b)

Morris

Claims 1-7 stand rejected under 35 USC § 102(b) as being anticipated by US Patent No. 5,600,929 to Morris.

With respect to claim 1 Examiner states that Morris discloses a prefabricated panel having a ribbed interior skin made of metal (fig. 10: 12), a flat exterior skin made of fiberglass (fig. 10: 16) and a foam core sized to fit between the two skins (fig. 10:14).

Claim 1, as amended, contains elements not present in Morris. Claim 6 has been canceled and claim 1 contains the element of an axial or lengthwise slot cut in the core material, for insertion of wiring, conduit, or other construction elements, fasteners etc. Therefore, because claim 1 contains elements not disclosed in Morris, Morris does not anticipate this claim and Applicant respectfully requests withdrawal of the rejection.

With respect to claim 2 Examiner states that Morris discloses metal ribbed skin (fig. 10:12).

Claim 2 is dependent on a base claim, claim 1, that discloses elements not present in Morris. Therefore, because claim 1 is not anticipated by Morris, claim 2 is also not anticipated by Morris and Applicant respectfully requests withdrawal of the rejection.

With respect to claim 3 Examiner states that Morris discloses a fiberglass skin (fig. 10:16).

Morris actually does not disclose a fiberglass skin. It discloses a "perlite" roofing board at column 6, lines 10-11. Perlite is not fiberglass. According to the website [www.perlite.net](http://www.perlite.net), a website directed to information about perlite; "Perlite is a generic term for

naturally occurring siliceous rock. Because of perlite's outstanding insulating characteristics and light weight, it is widely used as a loose-fill insulation in masonry construction. In this application, free-flowing perlite loose-fill masonry insulation is poured into the cavities of concrete block where it completely fills all cores, crevices, mortar areas and ear holes. In addition to providing thermal insulation, perlite enhances fire ratings, reduces noise transmission and it is rot, vermin and termite resistant. Perlite is also ideal for insulating low temperature and cryogenic vessels. When perlite is used as an aggregate in concrete, a lightweight, fire resistant, insulating concrete is produced that is ideal for roof decks and other applications. Perlite can also be used as an aggregate in Portland cement and gypsum plasters for exterior applications and for the fire protection of beams and columns. Other construction applications include under-floor insulation, chimney linings, paint texturing, gypsum boards, ceiling tiles, and **roof insulation boards.**"

Therefore, Morris does not disclose a fiberglass skin as claimed in claim 3. In addition, claim 3 is dependent on claim 1 which contains elements not disclosed by Morris. Thus, because claim 1 is not anticipated by Morris, claim 3 is also not anticipated by Morris. Therefore, Applicant respectfully requests withdrawal of the rejection.

With respect to claim 4 Examiner states that Morris discloses a foam core (fig. 10:14).

Claim 4 is dependent on a base claim, claim 1, that discloses elements not present in Morris. Therefore, because claim 1 is not anticipated by Morris, claim 4 is also not anticipated by Morris and Applicant respectfully requests withdrawal of the rejection.

With respect to claim 5 Examiner states that Morris discloses the panel section as terminating at midway of a rib (fig. 9:14).

Actually, Morris does not show the panel section as termination at midway of a rib. Reference numeral 14 of Morris is simply the edge of the "interior skin" or roofing board of Morris. The ribs are on the exiting metal roof of Morris, as element 22 of main panels 20 of

Morris. And, as can be seen in Figures 9 and 10 of Morris, the metal roof panels 20 are simply shown cut off, by the wavy lines. There is nothing in Morris that shows or describes the existing metal roof as terminating mid-rib. In addition, claim 5 is dependent on base claim 1 which is not anticipated by Morris. Therefore, because it discloses elements not present in Morris, namely the ribbed panel terminating mid-rib, and because it depends from a non-anticipated base claim, claim 5 is also not anticipated by Morris, and Applicant respectfully requests withdrawal of the rejection.

35 USC § 103(a)

Morris/Myers

Claim 6 stands rejected under 35 USC § 103(a) as being unpatentable over US Patent No. 5,600,929 to Morris in view of US Patent No. 5,088,259 to Myers.

Examiner states that Morris does not disclose a slot formed in the foam core, but that Myers discloses a slot in a foam cored panel (fig. 5). Examiner asserts that it would have been obvious to modify Morris by adding slots in the foam core in order to allow for air circulation, decrease weight and reduce costs.

Claim 6 has been canceled. However, the limitation of claim 6 is now in claim 1 and Applicant respectfully disagrees with Examiner's analysis of Myers. Thus, Applicant will comment on Myers.

Myers does not disclose a slot cut or formed in a foam core panel. There is no solid foam core panel in Myers that fills the valleys of the ribs. Myers simply adds a fire-retardant layer that lines, not fills, the ribs. In fact, the material lining the ribs of Myers is not foam at all. It is a fire retardant layer 50 comprised of a mixture of particles of Kaltherm or perlite 52 dispersed in a synthetic resin binder 53. See Column 5, lines 3-19. Thus, it can be seen from Myers that there is no solid foam core that fills the ribs, rather there is simply a coating of fire retardant material laid along the surface of the ribs. A thin layer of fire retardant material

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applied over the surface of ribs is simply not the same as a solid foam core that fills the ribs, but may have a slot or channel cut therethrough. The only reason there is any gap in Myers is because there is nothing filling the ribs.

Therefore, if one applied the thin fire retardant layer of material of Myers to the ribs of Morris, there would be no gap or slot present at all. There would simply be a fire retardant layer beneath the solid core of Morris. Thus, the combination of Myers and Morris can not result in Applicant's invention. There is simply no teaching in either Myers or Morris to provide a slot or channel *IN* a foam core, and the combination of Myers and Morris would not result in a slot or channel in a foam core.

Therefore, based on the claims as amended, and the explanation presented above, the rejection has been overcome and Applicant respectfully requests withdrawal of the rejection to the slot formed in the foam core, which is now in claim 1.

Morris/Karrfalt

Claims 7 and 8 stand rejected under 35 USC § 103(a) as being unpatentable over US Patent No. 5,600,929 to Morris in view of US Patent No. 4,936,071 to Karrfalt.

Examiner states that claims 7 and 8 are rejected for the reasons cited for rejection of claim 1 (102(b)), however, Morris does not disclose joining the panels together at mid-rib edges and affixing a cap over the joint area. Examiner asserts that Karrfalt discloses joining ribbed panels together at mid-rib edges by fastening a panel over the joined area (fig. 1:15). Therefore, Examiner asserts that it would have been obvious to modify Morris by adding a cap, as disclosed by Karrfalt, in order to better secure the connections of panels to obtain a desired length while maintaining structural integrity.

With respect to the rejection of claim 1, claim 1 has been amended and contains elements not present in Morris. Therefore the 102(b) rejection has been overcome. With respect to claims 7 and 8, they both have been amended to make it clear that the panels of

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Applicant's invention only abut edge to edge at the half-way point of a rib, to form one complete, but flush and non-overlapping, rib when joined. The ribs of Karrfalt are clearly not joined "mid-rib" or at the half-way point of a rib. It can clearly be seen in all the Figures of Karrfalt, but especially clearly in Figures 1 and 2 that the panel sections of Karrfalt overlap. In fact, it is specifically disclosed at Column 3, lines 57-65 wherein it is stated that: "...Adjacent panels 2 have their terminal longitudinally extending ends 8 *overlapped* by the end most ridge of the adjacent panel as shown particularly in Figure 2....". Thus, the panels of Karrfalt do not end mid-rib or at the half-way point of a rib, and they are not joined mid-rib or at the half-way point of a rib at all. They do not form a complete, flush rib when they are joined. There is a bump or raised seam where they overlap.

Thus, Karrfalt actually teaches away from joining the ribs at their mid or half-way point to form one complete, flush rib. Karrfalt requires that the ribs be overlapped the entire width of a rib by saying that they are overlapped by the end most ridge. In fact, if each rib of two adjoining panels were terminated mid-rib or at half the width, there could be no overlap in Karrfalt! Or if there were, some width would be lost. Therefore, to maintain an even, equal rib width, the ribs of Karrfalt can not be joined mid rib, but require two complete ribs to overlap. Therefore, Karrfalt teaches away from two half ribs being joined to form one complete flush rib with no overlap.

In addition, even if Karrfalt puts some sort of cap over its panels where they are joined, it does not teach joining panels flush at mid-rib. However, Karrfalt does not disclose a cap over the panels to secure the joint. Karrfalt merely discloses a tape laminate 15 that is taped across the seams to make them watertight. See Column 4, lines 33-37 in which tape 15 is described as waterproofing the seams. Thus, there is in fact no cap taught at all in Karrfalt.

In summary, Karrfalt teaches away from joining panels at half ribs, by requiring overlap of each joining panel, and Karrfalt does not teach anything about a cap or additional aid to joining their panels. The tape laminate does not provide strength to the joint, it merely waterproofs the seam. Thus, Karrfalt teaches away from Applicant's flush joining of adjacent half ribs, and Applicant's optional cap or other joint securing device. Therefore, even if the

tape laminate of Karrfalt were combined with the device of Morris, Applicant's invention would not and could not result. There simply no teaching in either Morris or Karrfalt to join panels at adjacent, but non-overlapping, half rib edges. Nor is there any teaching in either Morris or Karrfalt to add a cap to secure the joint.

Thus, Applicant's invention is not taught or suggested in any way by either Morris or Karrfalt, but rather they teach away from Applicant's invention. Therefore, because Applicant's invention is not taught by the cited references, Applicant respectfully requests withdrawal of the rejections.

Morris

Claims 9-14 stand rejected under 35 USC § 103(a) as being unpatentable over US Patent No. 5,600,929 to Morris.

Examiner states that claims 9-14 are rejected for reasons cited in rejection of claim 1, but that Morris does not disclose ramlock securing devices and grommets to connect panels. Examiner then cites Applicant's statement (in prior response to § 112 rejections, wherein Examiner stated claims 9-14 were indefinite because of lack of detailed description of ramlocks and grommets!) that ramlocks and grommets are common in the art in making the assertion that it therefore would have been obvious to modify Morris by using ramlocks and grommets to better secure sections together, as ramlocks and grommets are commonly used in the art of construction for securing construction components, such as wall panels together.

Applicant traverses these rejections. Claim 1 has been amended and Applicant has overcome the rejection of claim 1, thus the reasons cited in the rejection of claims 9-14, with respect to claim 1, have also been overcome.

In addition, the specification has been amended to clearly define the structure and use of ramlocks, grommets and ramlock tubes in connecting the panels of Applicant's invention. Thus, because the rejections to claim 1 have been overcome and because the specification has

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been amended and the § 112 rejections of claims 9-14 have been overcome, it would not be obvious to use ramlocks, grommets or ramlock tubes to connect the panels of Morris.

In fact, Morris does not disclose or teach, explicitly or implicitly, the need for or use of any sort of connection means for its invention at all. Morris is not directed at connecting adjacent panels. Morris simply uses existing metal roofs that might not be joined at all, but may simply have one large sheet of corrugated metal as the roof. Morris teaches nothing whatsoever about how or why one might want or need to use any sort of device to connect adjacent sections of original roof or adjacent sections of the re-roofing Morris supplies. Morris simply sprays or otherwise applies an insulation material over an old, existing metal roof then puts a perlite roofing board over the insulation material. There is no connection of adjacent sections taught at all.

Applicant, on the other hand, connects adjacent sections of prefabricated wall panel to make a continuous wall. Applicant needs to connect adjacent sections of wall panel to form a solid wall so that the panels will not simply fall over when stood in place. There is no need in Morris' re-roofing invention to connect existing roof sections (if there even is more than one section) because the roof sections would be secured to roof trusses or other underlying supports. Therefore, whether or not the structure and use of ramlocks, grommets and / or ramlock tubes were described in great detail by Applicant (with respect to § 112 ) there is simply no teaching or suggestion in Morris to use any type of connection device at all. They don't use or need them and thus do not teach anything about where, why or when one might use them.

Thus, because there is no need for any type of adjacent connection device in Morris, (because Morris does not connect anything other than by spray resin or adhesive to stick the roofing board on top of the sprayed on insulation), one would not be lead to use ramlocks, grommets or ramlock tube devices to connect adjacent panels as disclosed and claimed in Applicant's invention.



Therefore, because Morris teaches nothing of connecting devices, and in fact requires none, and teaches nothing of connecting adjacent panels of anything, the rejections to claims 9-14 as amended should be withdrawn and Applicant respectfully requests such withdrawal.

Examiner's Comments re: Applicant's Response to 1<sup>st</sup> OA

Examiner states that Applicant's previous arguments have been fully considered but did not find them persuasive. Examiner states that regarding the § 112 rejection of claims 9-14, Applicant fails to disclose the process of joining the panels together by use of ramlocks. Examiner says that Applicant states that ramlocks are common in the art for joining panels together, but that the specification has no clear description of structure or use regarding these fasteners. Examiner says that the specification and claims merely regard ramlocks as standard fasteners.

The Examiner goes on to say, with respect to the § 103 rejections of claims 9-14 that the prior art does not disclose the use of ramlocks or grommets to join the panels. Examiner bases this rejection on obviousness and states that the method of joining panels may be accomplished by any standard method and fastener, as criticality for the use of ramlocks is not disclosed.

Regarding the rejection based on the Morris, Examiner states that Morris does not disclose a wall structure, but that Morris discloses a structure having the same basic structure of the instant application. Examiner also states that Morris also discloses a ribbed interior skin as shown in fig. 10, component 27 and a flat exterior skin. Examiner states that these limitations meet the basic structure as claimed by Applicant in the rejected claims.

Finally, regarding the combination of Morris in view of Karrfalt, Examiner states that Karrfalt discloses ribbed panels joined together and reinforced. Examiner asserts that Karrfalt discloses the panel as being joined between panel ribs (fig. 5), and that therefore the connection is located at mid-rib. Therefore, Examiner made the Action Final.

Applicant has amended the claims and specification to clearly define the structure and use of ramlocks, grommets, and ramlock tube devices. In addition, the claims as amended contain elements not disclosed by Morris. In addition, it has been shown that Morris does not

even connect any adjacent elements and therefore adding ramlocks , grommets, ramlock tubes, or even screws, nails or bolts to Morris could not possibly lead one to Applicant's invention. Morris simply sprays on insulating, weatherproofing material over an existing metal roof, and tops it with perlite board. There is simply no teaching at all in Morris to connect adjacent prefabricated panels side to side.

With respect to Karrfalt, it has been shown that Karrfalt does not disclose solely adjacent connection of panels at half or mid rib, but rather requires overlapping panels of two complete ribs. Furthermore, it has been shown in Karrfalt, that Karrfalt does not disclose reinforcing of the panel connections, but merely waterproofing with tape along the seams.

#### Conclusion

Based on the specification and claims as amended, and the additional explanation provided above, the § 112 rejections of claims 9-14 have been overcome, the § 102(b) rejections have been overcome and the § 103(a) rejections have been overcome and the application is in condition for allowance. Applicant respectfully requests withdrawal of the rejections and allowance of the claims. If Examiner wishes to discuss allowable language with Applicant's attorney, Kristin Kohler can be reached at 1-231-275-3799 and would be happy work with Examiner towards allowance of this case. Any fees associated with this reply are submitted herewith.

Respectfully submitted,



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